

CLAIMS

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1. A rubber-modified styrenic resin with particles of a rubbery polymer dispersed therein, which is characterized in that its continuous phase has a weight-average molecular weight (M_wL) falling between 180,000 and 280,000, and that the weight-average molecular weight (M_wL) and the 1 cm drawdown time (sec) of the resin sheet satisfy the following formula:

$$1 \text{ cm drawdown time (sec)} > (M_wL/10^4) - 4.0.$$

2. The rubber-modified styrenic resin as claimed in claim 1, of which the continuous phase has a degree of branching of from 0.2 to 1.0 for its absolute molecular weight of 1,000,000 measured in GPC/LALLS.

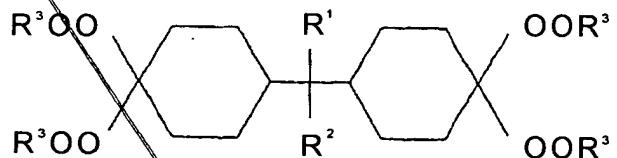
3. The rubber-modified styrenic resin as claimed in claim 1 or 2, of which the rubbery polymer content falls between 3 and 12 % by mass.

4. A method for producing a rubber-modified styrenic resin of any of claims 1 to 3 by polymerizing a rubbery polymer and a monomer component consisting essentially of a styrenic monomer in the presence of a polyfunctional initiator, wherein the amount of the polyfunctional initiator falls between 50 and 500 ppm relative to the monomer component consisting essentially of a styrenic monomer.

5. The method for producing a rubber-modified styrenic resin as claimed in claim 4, wherein the amount of the polyfunctional initiator falls between 100 and 500 ppm relative

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to the monomer component consisting essentially of a styrenic monomer.

6. The method for producing a rubber-modified styrenic resin as claimed in claim 4 or 5, wherein the polyfunctional initiator is a tetrafunctional organic compound of the following general formula:



wherein R^1 and R^2 each represent a hydrogen atom or an alkyl group having 1 or 2 carbon atoms; and R^3 represents an alkyl group having from 1 to 8 carbon atoms.

7. The method for producing a rubber-modified styrenic resin as claimed in any of claims 4 to 6, wherein the polyfunctional initiator is 2,2-bis(4,4-di-t-butylperoxycyclohexyl)propane.

8. A method for producing a rubber-modified styrenic resin of any of claims 1 to 3 by polymerizing a rubbery polymer and a monomer component consisting essentially of a styrenic monomer in the presence of an unsaturated compound having a plurality of copolymerizing double bonds, wherein the amount of the unsaturated compound falls between 50 and 250 ppm relative to the monomer component consisting essentially of

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a styrenic monomer.

9. A rubber-modified styrenic resin sheet prepared by molding the rubber-modified styrenic resin of any of claims 1 to 3.